

REMARKS

Claims 46-51 and 77 are amended. Claims 38-82 are in the application for consideration.

Claims 46-51 and 77 are amended to overcome the Examiner's claim objections and 35 U.S.C. § 112 rejection regarding a lack of antecedent basis. Accordingly, entry of such amendments and the withdrawal of such objections and rejections are requested.

Claims 63-73 and 76-82 are rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-36 of U.S. Patent No. 6,673,701. Such rejection is obviated by the filing of a Terminal Disclaimer herewith. Accordingly, formal allowance of such claims is requested.

Independent claims 38 and 74 stand rejected as being anticipated by U.S. Patent No. 6,270,572 to Kim et al. Applicant disagrees and requests reconsideration.

Independent claims 38 and 74 recite flowing multiple time spaced inert purge gas pulses within the deposition chamber intermediate the flowing of the first precursor gas and the second precursor gas. The Examiner asserts that Kim et al. discloses the same in its steps 130 and 140 in Fig. 11. Applicant disagrees. Independent claims 38 and 74 require that the first and second precursor gases be different in composition. The depicted time period between the flowing of the first precursor gas and a different

composition second precursor gas in Fig. 11 of Kim et al. is that processing occurring intermediate steps 115 and 125, not between steps 130 and 140 and regardless steps 130 and 140 use gas of the same composition. Illustrated between steps 115 and 125 is a step 120 directed to removing the physisorbed first reactant, and which is stated to be either a purge or a pump step in the Kim et al. specification. However, there is no disclosure, suggestion, or statement that step 120 of Kim et al. comprises multiple time spaced inert purge gas pulses. Rather, the inference is with respect to a single inert gas pulse. Accordingly, independent claims 38 and 74 are not anticipated by Kim et al.

Further, independent claims 38 and 74 are similar to amended claim 1 in the parent application, and which was formally allowed over Kim et al. The Patent Office's rejection of claims 38 and 74 over Kim et al. in this application is believed to be inconsistent with the allowance of amended claim 1 in the parent application. If the Examiner is to persist in this rejection, it is requested that the Examiner indicate the rationale for the allowance of amended claim 1 in the parent application, and the lack of allowance of claims 38 and 74 as presented herein.

Regardless, claims 38 and 74 are allowable over Kim et al., as argued above, and action to that end is requested.

Independent claims 52 and 75 stand rejected as being anticipated by Kim et al. Applicant disagrees and requests reconsideration.

Independent claims 52 and 75 recite the flowings of first, second and third precursor gases which are different in composition from one another, and wherein the second precursor gas flowing comprises a plurality of time spaced second precursor gas pulses. The Examiner asserts that Kim et al. discloses forming composite oxides or nitrides comprising at least three precursors, relying on col.6, Ins.50-57. The undersigned has reviewed such section of Kim et al. and finds no statement or inference that at least three different precursors are utilized. Rather, the language upon which the Examiner relies defines the material which is deposited, and does not make any reference to the precursors utilized to form such materials. If the Examiner is asserting that it must be inherent that three different precursors are utilized to form such composite materials, the undersigned disagrees.

Specifically, the the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. To establish inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference. Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. (See, MPEP §2112).

It is not indicated in Kim et al. what precursors are utilized to form the stated composite materials. However, the Kim et al. reference discloses a process wherein only different composition first and second precursors are utilized. Further, such composite materials could be formed from first and

second precursors comprising a combination of the various multi-element composite materials disclosed in Kim et al. Since there is no reference to more than two different composition precursors in Kim et al., the teaching to a person of skill in the art is to use two different composition precursors, and regardless, it is not inherent that more than two deposition precursors necessarily would be utilized to form the stated composite materials. Accordingly, for the foregoing reasons, Applicant's independent claims 52 and 75 are not anticipated by Kim et al., and the rejection should be withdrawn. Action to that end is requested.

Further, independent claims 52 and 54 are similar to amended claim 17 in the parent application, and which was formally allowed over Kim et al. The Patent Office's rejection of claims 52 and 75 over Kim et al. in this application is believed to be inconsistent with the allowance of amended claim 17 in the parent application. If the Examiner is to persist in this rejection, it is requested that the Examiner indicate the rationale for the allowance of amended claim 17 in the parent application, and the lack of allowance of claims 52 and 75 as presented herein.

Applicant's dependent claims should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

This application is believed to be in immediate condition for allowance.

Respectfully submitted,

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